



SWARC NEWS

Meeting Notes

SWARC held its monthly meeting on 8 January 2018 at the American Legion located at 6400 Johnson Pond RD Fuquay-Varina. Meeting was called to order at 1900 by President Jason. Jason turned the meeting over to Bernie, KM4QVG who led the club in reciting the pledge of allegiance.

Introductions were made.

We then received the different reports.

President

OLD BUSINESS

Club merchandise (aka swag) is awaiting a report from Nancy, KM4KUT

Constitution committee is in progress and the final revision of proposals are being written

Many thanks to John, WB4UFO for stepping up and taking over the Traders Net and the Tech Net on Tuesday evenings at 20:00

Winter Field Day will be held at Ryan, NC4RA residence on January 27, 2018. All are invited. It is usually a good time and a lot of fun. Hope to see you there.

NEW BUSINESS

New Raffle for Summer Field day will consist of the same prizes as the Christmas Raffle. 1st prize will be the Kenwood TM-V- 71A. 2nd prize will be the Kenwood TM-281A 3rd prize will be the Tigertronics USB interface. 300 tickets are going to be printed and ready for sell. The tickets will sell for \$5.00 each. Good luck to all who buy the tickets.

Program for the February meeting is the SWARC Auction. The auction will be conducted by KA0GMY. Steve has been the auctioneer in the past and runs a full combat auction. If you move talk or sneeze it is considered a bid so come prepared for some fancy bidding. Those that will be entering items for auction must have the registration done by 1815.

The meal for the next meeting is scheduled to be pizza.

The meeting place is still up in the air. Be sure to check the club web page on the meeting location.

Plans for Summer Field day are starting. Brian, KK4BK is heading this project up. If you wish to help or have equipment to be used please contact Brian.

The club has decided to make a \$800.00 donation to Danny, K4ITL for the maintenance of the PCRN repeaters.

Mike, KD4OKR is our main contact with the Legion. He reports there has been a large sum of money appropriated for the combined club station room renovation. Steve, KA0GMY suggested we help with this but it was decided to wait on further funding to observe the Legion and see how they move forward.

Thanks to all who came to the meeting. We appreciate your participation. We also need you to speak up and be heard at the appropriate times. We need to enjoy the ham radio portion of the club not just the social aspect.

South Wake Amateur Radio Club Treasurer Report December 2017

Club Addition and Reduction Activity

Additions

50/50	38.00	cash	
Dues	35.00	cash	Dave (NW3U) and Penny Krum
Dues	35.00	check #3743	Bradley (KM4JYR) and Tonya Norton
Dues	35.00	cash	Rick Sneed (KM4JMI) and Heather Beveridge (KM4TNB)
Dues	30.00	cash	Jonathan Wright (W1JCA)

Raffle Tickets	700.00	cash/check	sale of raffle tickets \$615.00 cash + \$85.00 check #775
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Total

Additions 873.00

Reductions

Meal cost	20.00	cash	reimbursed Mike Ramsey (KD4OKR)
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Total

Reductions 20.00

RBC Bank Account Activity

Balance as of 12/04/2017	4076.19		
Addition	873.00		
Reduction	20.00		

Balance as of

01/08/2018 4929.19

Christine Fernandini KJ4AEO 01/08/2018

NET Report

No NET Report has been submitted there is nothing to report other than NETs were held.

Seeing how our NET Whip has just volunteered for the position then there will not be a report.

Please we ask that all future net reports to please send the net reports to Jonathan at sharpsburg1130@gmail.com

A big thank you to Jonathan for stepping up.

Membership Report

Ryan, NC4RA was absent from the meeting but at last count we had 89 members and we had two join tonight, That will give us a count of 91 members and still going strong.

Public Service

Mike, KD4OKR had nothing to report on Public Service

Vice President

The Technician class is on schedule and will begin on January 13, 2018. Classes to be held at the American Legion Post. There are currently 15 people scheduled to attend. Good luck to all

Pictures from the January Meeting









Fox-1D Amateur Radio CubeSat Launches Successfully, Now Designated as AO-92

01/15/2018

Right on schedule at 0359 UTC on January 12, the solid-fueled first stage and ground-lit strap-on boosters of the Indian Space Research Organisation (ISRO) Polar Satellite Launch Vehicle (PSLV) ignited and hurtled **AMSAT-NA's Fox-1D** CubeSat along with 30 other satellites onboard the PSLV-C40 mission toward a sun-synchronous orbit. Less than 18 minutes later, the primary payload, a Cartosat-2 series imaging satellite for the Indian government, separated from the launcher's fourth stage, followed by other satellites on the mission. By 27 minutes into the flight, confirmation came that all nanosatellites had been deployed. Fox-1D was in orbit!

Just before 0500 UTC, Fox-1D passed over western North America, but the onboard timer that ensures the satellite does not deploy antennas and begin transmitting until it's clear of the launch vehicle and other satellites had not yet expired."

“At about 0517 UTC, the satellite came to life and its antennas deployed over the North Pole,” AMSAT **reported**. “The AMSAT Engineering team and Amateur Radio operators worldwide were watching various WebSDRs for signs of life. Around 0525 UTC, the characteristic “Fox tail” of the Fox-1 FM transmitter was seen on multiple WebSDRs. Fox-1D was alive!” At 0528 UTC, the first frame appeared on the AMSAT telemetry server, uploaded by Anatoly Aleksandrov, UA9UIZ, and initial telemetry values confirmed that the satellite was healthy.

AMSAT-NA OSCAR Number Administrator Bill Tynan, W3XO, has designated Fox-1D as AMSAT OSCAR 92 or AO-92. Fox-1D, a 1U CubeSat, is the third of AMSAT’s five Fox-1 CubeSats to reach orbit. It was preceded by AO-85 (Fox-1A) and AO-91 (RadFxSat / Fox-1B).

AMSAT Engineering reminds stations that the satellite will not be available for general use until the on-orbit checkouts are complete. AMSAT invites continued telemetry reports to assist the engineering team to complete commissioning.

“During commissioning, the transponder may be active at times, but please do not transmit as you may interfere with important tests that must be completed before the satellite is commissioned,” AMSAT said. “The commissioning process is expected to take up to 2 weeks.”

See the AMSAT-NA website for an **update** on AO-92 commissioning and payload testing. Additional updates may be posted this week.

In addition to a Fox-1 U/V FM transponder, Fox-1D will carry several university experiments, including a MEMS gyro from Pennsylvania State University-Erie, a camera from Virginia Tech, and the University of Iowa’s High Energy Radiation CubeSat Instrument (HERCI) radiation mapping experiment. Fox-1D also carries the AMSAT “L-Band Downshifter,” which gives the option of utilizing a 1.2 GHz uplink for the FM transponder. The Fox-1D downlink will be on 145.880 MHz, and uplinks will be on 435.350 and 1,267.350 MHz (67 Hz CTCSS), switchable.

The PSLV launcher also carried the French **PicSat**, which includes a V/U FM transponder. PicSat will perform space observations. The transponder uplink is 145.910 MHz, the downlink is 435.525 MHz. — *Thanks to AMSAT News Service and Paul Stoetzer, N8HM*



Registration Now Open for HamSCI Workshop Aimed at Hams and Space Science/Weather Researchers

01/15/2018

Registration now is open for a 2-day **HamSCI** — the Amateur Radio citizen science initiative — **workshop** February 23-24 at New Jersey Institute of Technology (NJIT) in Newark. The 2018 HamSCI Workshop will be held in the **NJIT Campus Center Ballroom**. Complimentary parking is available at the **NJIT Parking Deck**, 154 Summit Street, Newark.

“The 2018 HamSCI workshop will focus on results of the 2017 Great American Eclipse and the development of a Personal Space Weather station,” said Nathaniel Frissell, W2NAF, Assistant Research Professor at NJIT’s Center for Solar-Terrestrial Research. “We are especially looking for speakers with presentations showing analysis of 2017 Great American Eclipse ionospheric observations, ideas and proposals for the design and implementation of a personal space weather station. We will also accept other presentations related to Amateur Radio and science.”

Frissell expects that presentations will run between 20 and 30 minutes. **Contact** Frissell if you would like to present and provide an abstract by February 15. Presentations should be on any topic about how the ionosphere and/or radio propagation was affected by the eclipse.

Frissell said all hams and scientists interested in ham radio science are welcome. “This aim of this workshop is to foster collaborations between the ham radio and the space science and space weather research communities through presentations, discussions, and demonstrations. This year’s meeting will focus on solar eclipse analysis, ham radio data sources and databases, and the development of a ‘personal space weather station.’”

The schedule calls for oral presentations on “Ham Radio Data Sources, Databases Analysis” and “Solar Eclipse Effects on the Ionosphere, including results from the Solar Eclipse QSO Party.” Phil Erickson, W1PJE, of MIT’s Haystack Observatory is scheduled to be the Friday evening banquet speaker. Tutorials on Saturday will include “Ham Radio for Space Scientists,” “Space Science for Ham Radio Operators,” with Frank Donovan, W3LPL, and “Space Science for Ham Radio Operators.”

Friday registration is \$100, which includes breakfast, lunch, and banquet ticket. Saturday registration is \$25, which includes breakfast and lunch. Friday banquet tickets are \$50.

“The ham radio data sources and databases session addresses an ongoing HamSCI topic,” Frissell told ARRL. “We will have presentations and discussions about the current methods that we use to collect data in ham radio, how it is stored, and how we can make it more scientifically useful, and current analysis making use of these datasets.” Frissell said a huge amount of data already is available from such sources at the Reverse Beacon Network (**RBN**), **PSKReporter**, and **WSPRNet**. “However, this

data is really designed for Amateur Radio use, and new techniques need to be developed to make it useful scientifically,” he added.

Frissell said HamSCI would like to encourage development of the personal space weather station concept. “This is analogous to a personal weather station that people install at their homes to measure temperature, wind speed, rain fall, humidity, etc, reporting this data to groups like the NWS, NOAA, and Weather Underground,” Frissell said. “We want to create a similar package for space weather and have that data go to a single repository.”

Frissell said he hopes hams attending will come away more knowledgeable about ionospheric and space science, and scientists will gain a better understanding of Amateur Radio.



BOARD OF DIRECTORS

Appointed Positions

President

Jason Upchurch – KM4PFV

Vice President

Brian Knox – KK4BK

Secretary

Nancy Butterfield – KM4KUT

Treasurer

Christy Fernandini - KJ4AEO

Member-At-Large

Steve Mowels – KA0GMY

Member-At-Large

Jim Young – K9RII

Member-At-Large

John Cook – N4RMV

Membership Chair

Ryan Avery , NC4RA

NET MANAGER

Jonathan – W1JCA

Special Events Director

Gino Fernandini – KI4YXO

Public Service Director

Tim Ruffin – W4TAR

Mike Ramsey – KD4OKR

Chris Picar - K4CLP

Next Meeting

The next meeting will be February 5, 2018. Dinner will start at 6 pm. Meal will be Pizza. There will be a \$5.00 per person charge. Be sure to sign up so we know how many pizzas to get. We also ask you to bring a side dish to share. The program will be the SWARC Auction by Steve, KA0GMY

SWARC Mission Statement

South Wake ARC's primary purpose is to further the Amateur Radio Service through programs, activities, and education, in order to promote the radio knowledge, fraternalism and individual operating efficiency of our members. Further, it shall be our purpose to support the welfare of our community through public service including radio communications for emergency situations and public events, and through providing information, training, and assistance to individuals or organizations with an interest in the Amateur Radio Service.

LINKS *(if you have other links you want added then send them to me)*

PRN

A Wide Area Digital Amateur Radio Network www.ncprn.net

GigaParts

www.gigaparts.com

QRZ

www.qrz.com

Ham Radio Outlet HRO

www.hamradio.com

Raleigh Amateur Radio Society RARS

www.rars.org

Johnson Amateur Radio Society JARS

www.jars.net

South Wake Amateur Radio Club SWARC

www.southwakearc.com